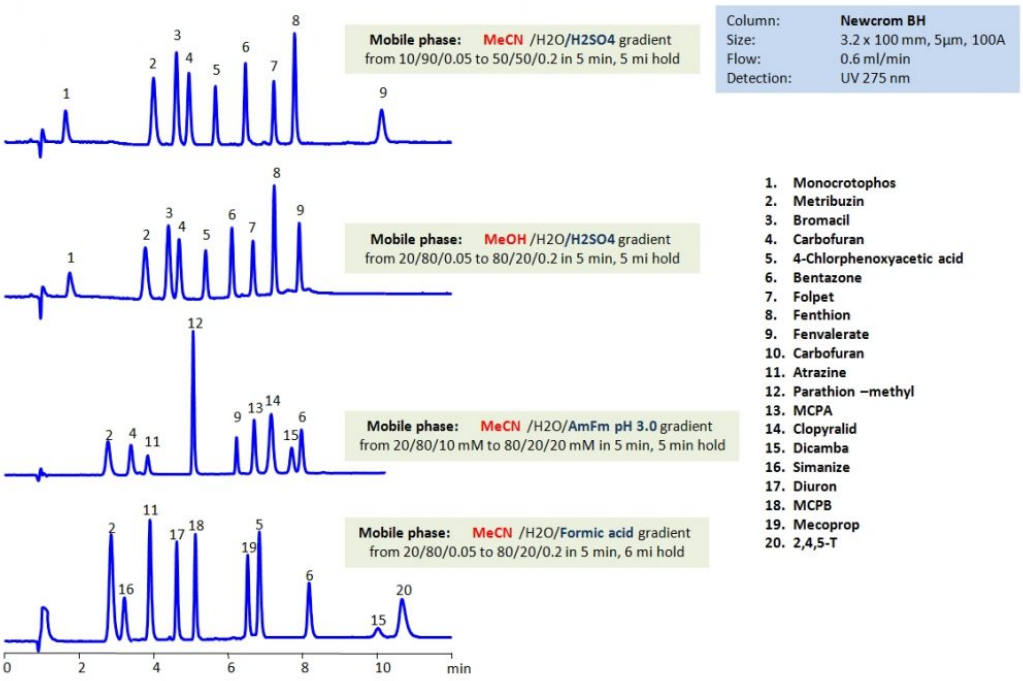
HPLC Separation of Pesticides, Herbicides, Fungicides, and Insecticides on Newcrom BH Column



High Performance Liquid Chromatography (HPLC) Method for Analysis of Mecoprop , MCPB , Diuron , Simazine , Dicamba , Clopyralid , MCPA , Atrazine , Carbofuran , Fenvalerate , Folpet , Bentazone-sodium , 2,4,5-Trichlorophenoxyacetic acid , 4-CPA , Methyl parathion , Metribuzin , Monocrotophos .

Herbicides are used to control unwanted plants, they are also known as weedkillers. Insecticides are used to kill insects. Fungicides are used to kill parasitic fungi. Pesticide is a more generic term that includes herbicides, fungicides and insecticides in its definition. All are heavily used in agriculture.

By using HPLC, many different pesticides can be separated and their retention characteristics controlled using the Newcrom BH mixed-mode column. It can be used with different organic media such as acetonitrile (ACN) or methanol (MeOH). By varying the concentration of organic modifier and using different buffers like sulfuric acid (H2SO4), ammonium formate (AmFm), or formic acid, separation of desired pesticides can be achieved.

Method Parameters

Column	Newcrom BH, 3.2 x 100 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN, MeOH
Buffer	H2SO4, Formic acid, AmFm pH 3.0
Flow Rate	0.6 mL/min
Detection	UV 275 nm

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